

MATERIAL SAFETY DATA SHEET

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

COMPANY ADDRESS: Control Solutions Inc
5903 Genoa-Red Bluff
Pasadena, TX 77507-1041

EMERGENCY TELEPHONE NUMBERS: (800) 424-9300 (CHEMTREC, transportation and spills)
(800) 900-4000 (Poison Control Center, human health)

PRODUCT NAME : Martin's Lawn & Perimeter Granules
CHEMICAL NAME : (3-phenoxyphenyl) methyl-cis, trans-3-(2,2-dichloroethenyl)-
2,2 dimethylcyclopropanecarboxylate)
CHEMICAL FAMILY : Synthetic pyrethroid
PRODUCT CODE : EPA Reg. No. 53883-39

SECTION 2 - COMPOSITION, INFORMATION OF INGREDIENTS

COMPONENT	PERCENTAGE	CAS NUMBER	OSHA PEL	ACIGH TLV
Permethrin	0.25%	52645-53-1	Not listed	Not listed

SECTION 3 - HAZARDS IDENTIFICATION SUMMARY

(As defined by OSHA Hazard Communication Standard, 29 CFR 1910.1200)

EMERGENCY OVERVIEW: Light brown granules.

- Avoid breathing dust.
- Avoid contact with eyes, skin or clothing.
- Keep out of reach of children.

Symptoms of over exposure may include diarrhea, salivation, tremors, hyperactivity and hypersensitivity.

POTENTIAL HEALTH HAZARDS:

EYE - Mildly irritating to the eyes.

SKIN - May cause skin irritation, numbing, burning and tingling.

INHALATION - Slightly irritating to respiratory tract.

INGESTATION - May be harmful if swallowed.

ENVIRONMENTAL HAZARDS:

Extremely toxic to fish, other water organisms and bees. Keep out of waterways.

SECTION 4 - FIRST AID MEASURES

FIRST AID	
Have the product container or label when calling a poison control center or doctor, or going for treatment.	
If on skin or Clothing	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
If in eyes	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
If inhaled	<ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. • Call a poison control center or doctor for further treatment advice.

SECTION 5 - FIRE FIGHTING MEASURES

FLASHPOINT (method): Not applicable to this product.

FLAMMABLE LIMITS (LFL-UFL): Not applicable to this product.

FIRE AND EXPLOSION HAZARD: Can burn in fire. Irritating and toxic gases may be generated by thermal decomposition or combustion.

EXTINGUISHING MEDIA: Use foam, dry chemical, carbon dioxide, or water spray when fighting fires involving this material.

FIREFIGHTING INSTRUCTIONS: Evacuate area and fight fire upwind from a safe distance to avoid hazardous vapors and decomposition products. Dike and collect water used to fight fire to prevent environmental damage due to run off. Foam or dry chemical fire extinguishing systems are preferred to prevent environmental damage from excessive water run off.

FIREFIGHTING EQUIPMENT: Self-contained breathing apparatus with full facepiece. Full firefighting turn-out gear (Bunker gear).

HAZARDOUS COMBUSTION PRODUCTS: Carbon monoxide and/or carbon dioxide. Chlorine and hydrogen chloride may be formed.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Clean up spills immediately, observing precautions in Section 8 of this document.

SMALL SPILL: Vacuum or sweep up material and place in a container for reuse or disposal.

LARGE SPILL: Same as for small spill. After removal flush and neutralize contaminated area thoroughly with water and a dilute solution of soda ash or bleach. Pick up wash liquid with absorbent and place in chemical waste container for disposal. This material is a water pollutant and should be prevented from entering sewage and drainage systems and bodies of water.

SECTION 7 - HANDLING AND STORAGE

HANDLING: Use only in a well-ventilated area.

STORAGE: Store in cool, dry area away from children and domestic animals.

SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

EXPOSURE LIMITS (8 HOUR TWA): (Refer to Section 3)

ENGINEERING CONTROLS: Ventilation is normally required when handling or using this product to keep exposure to airborne contaminants below the exposure limit. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

PERSONAL PROTECTIVE EQUIPMENT:

EYE PROTECTION - Safety glasses.

CLOTHING - Long-sleeved shirt and long pants. Shoes plus socks.

GLOVES - Waterproof gloves.

RESPIRATOR - When handling in enclosed areas where exposure limits may be exceeded, use a dust/mist filtering respirator (MSHA/NIOSH approval number prefix TC-21C).

Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

USER SAFETY RECOMMENDATIONS: Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL DESCRIPTION: Tan to gray granule.

ODOR: No appreciable odor.

MOLECULAR WEIGHT (technical): 391.3.

MOLECULAR FORMULA (technical): $C_{21}H_{20}C_{12}O_3$

BULK DENSITY: 35 - 40 lbs./cu.ft.

pH: 5.2
 VAPOR PRESSURE: Negligible.
 % VOLATILE: N/A
 WATER SOLUBILITY (technical): 0.2mg/L at 20 C.

SECTION 10 - STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable, however may decompose if heated.
CONDITIONS TO AVOID: Avoid excessive temperatures.
INCOMPATIBILITY WITH OTHER MATERIALS: Oxidizers.
HAZARDOUS DECOMPOSITION PRODUCTS: Thermal decomposition may release carbon dioxide, carbon monoxide, sulfur oxides, halogen, halogen acids and possible trace amounts of carbonyl halide.
HAZARDOUS POLYMERIZATION: Product will not undergo polymerization.

SECTION 11 - TOXICOLOGICAL INFORMATION

ACUTE TOXICITY:

Oral LD ₅₀ (rat)	-	> 5,000 mg/Kg
Dermal LD ₅₀ (rat)	-	> 2,000 mg/Kg
Inhalation LC ₅₀ (rat)	-	N/A
Eye Irritation (rabbit)	-	Slight
Skin Irritation (rabbit)	-	Very slight
Sensitization (guinea pig)	-	Possible sensitizer

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: None known.

CARCINOGEN STATUS:

OSHA	-	Not listed.
NTP	-	Not listed.
IARC	-	Not listed.

MUTAGENIC DATA: No evidence of effects during *in vivo* or *in vitro* studies.

ADDITIONAL DATA: Not known to exhibit reproductive or birth defects. Repeated or prolonged low level exposure may cause sensitization to subsequent exposures.

SECTION 12 - ECOLOGICAL INFORMATION

ENVIRONMENTAL SUMMARY: This product is extremely toxic to fish. Do not apply directly to water. Drift and runoff from treated areas may be hazardous to aquatic organisms in treated areas. Do not contaminate water when disposing of equipment washwaters.

FISH TOXICITY: (Technical)

96 hour LC₅₀, Rainbow trout - 2.5 ug/L.

96 hour LC₅₀, Bluegill - 1.8 ug/L.

AVIAN TOXICITY: (Technical)

Oral LD₅₀, Japanese quail - >13,500 mg/Kg.

BEE TOXICITY: Highly toxic.

SECTION 13 - DISPOSAL CONSIDERATIONS

WASTE: Dispose of in accordance with applicable Federal, state and local laws and regulations.

CONTAINER: Refer to product label.

SECTION 14 - TRANSPORT INFORMATION

DOT SHIPPING DESCRIPTION: Agricultural Insecticide, Solid, N.O.I.B.N.

DOT HAZARD CLASS: N/A

UN NUMBER: N/A

DOT PACKING GROUP: N/A

DOT PRIMARY/SECONDARY LABEL: None required.

DOT PRIMARY/SECONDARY PLACARD: None required.

DOT EMERGENCY RESPONSE GUIDE #: N/A

SECTION 15 - REGULATORY INFORMATION

FIFRA: All pesticides are governed under the Federal Insecticide, Fungicide, and Rodenticide Act. The regulatory information presented below is pertinent only when this product is handled outside of the normal use and application as a pesticide.

OSHA HAZARD COMMUNICATION STANDARD STATUS: Regulated.

CERCLA REPORTABLE QUANTITY: N/A

SARA TITLE III STATUS:

302 Extremely Hazardous Substance	- No
311/312 Hazard Categories	- Immediate
313 Toxic Chemicals	- Permethrin (52645-53-1)

CALIFORNIA PROP 65 STATUS: Not Listed

SECTION 16 - OTHER INFORMATION

DISCLAIMER: The information presented herein is based on available data from reliable sources and is correct to the best of Control Solutions, Inc. knowledge. Control Solutions, Inc. makes no warranty, express or implied, regarding the accuracy of the data or the results obtained from the use of this product. Nothing herein may be construed as recommending any practice or any product in violation of any law or regulations. The user is solely responsible for determining the suitability of any material or product for a specific purpose and for adopting any appropriate safety precautions. We disclaim all liability for injury or damage stemming from any improper use of the material or product described herein.

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REVISED FOR: